

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	5	wo-200016810-\$.did. or wo-2002032421-\$.did. or "6733744".pn. or wo-9847538-\$.did.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	AND	ON	2005/09/01 11:02
L2	7	wo-200016810-\$.did. or wo-2002032421-\$.did. or "6733744".pn. or wo-9847538-\$.did. or wo-9852609-\$.did.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	AND	ON	2005/09/01 11:02
S2	2	"20040022731".pn.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	AND	ON	2005/09/01 11:01
S3	2	"20040028611".pn.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	AND	ON	2005/08/31 17:12
S4	596	tricarboyanin\$	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	AND	ON	2005/08/31 17:12
S5	571	S4 and dye	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	AND	ON	2005/08/31 17:12
S6	216	S5 and fluorescent	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	AND	ON	2005/08/31 17:12
S7	515	S4 same dye	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	AND	ON	2005/08/31 17:12
S8	186	S7 and fluorescent	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	AND	ON	2005/08/31 17:21
S9	2	"6086737".pn.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	AND	ON	2005/08/31 17:29

S10	2	wo-9852609-\$.did.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	AND	ON	2005/08/31 19:31
S11	103	S4 and succinim\$	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	AND	ON	2005/08/31 18:15
S12	103	S5 and succinim\$	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	AND	ON	2005/08/31 18:50
S13	2	"5242680".pn.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	AND	ON	2005/08/31 19:01
S14	2	"6306628".pn.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	AND	ON	2005/08/31 19:14
S15	5	"3337583".pn.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	AND	ON	2005/08/31 19:14
S16	2	"3337583".pn.	USPAT; USOCR	AND	ON	2005/08/31 19:14
S17	1	wo-200016810-\$.did.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	AND	ON	2005/09/01 11:01
S18	1	2000-317296.NRAN.	DERWENT	AND	ON	2005/08/31 19:32

> d his ful

(FILE 'HOME' ENTERED AT 10:44:22 ON 01 SEP 2005)

FILE 'REGISTRY' ENTERED AT 10:44:26 ON 01 SEP 2005

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L1          STRUCTURE UPLOADED
L2          STRUCTURE UPLOADED
L3          STRUCTURE UPLOADED
L4          STRUCTURE UPLOADED
L5          STRUCTURE UPLOADED
L6          STRUCTURE UPLOADED
L7          STRUCTURE UPLOADED
L8          110 SEA SSS FUL L4
L9          40 SEA SUB=L8 SSS FUL L3
L10         0 SEA SUB=L9 SSS FUL L6
L11         6 SEA SUB=L8 SSS FUL L1
L12         0 SEA SUB=L11 SSS FUL L6
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FILE 'HCAPLUS' ENTERED AT 10:49:19 ON 01 SEP 2005

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L13         8 SEA PLU=ON  L9
L14         8 SEA PLU=ON  L11
L15         1 SEA PLU=ON  L13 AND L14
L16        15 SEA PLU=ON  L13 OR L14
L17        14 SEA PLU=ON  L16 AND (PD<20030129 OR PRD<20030129)
L18        13 SEA PLU=ON  L16 AND (PD<20030124 OR PRD<20030124)
              D L18 1-13 IBIB HITSTR
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FILE 'MARPAT' ENTERED AT 10:53:26 ON 01 SEP 2005

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L*** DEL    0 DHIS
L19         0 SEA SSS SAM L1
L20        10 SEA SSS FUL L1
              D L20 1-10 IBIB IDE
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FILE HOME

FILE REGISTRY

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 31 AUG 2005 HIGHEST RN 862246-83-1

DICTIONARY FILE UPDATES: 31 AUG 2005 HIGHEST RN 862246-83-1

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2005

Please note that search-term pricing does apply when conducting SmartSELECT searches.

```
*****
*
* The CA roles and document type information have been removed from *
* the IDE default display format and the ED field has been added,   *
* effective March 20, 2005. A new display format, IDERL, is now     *
* available and contains the CA role and document type information.  *
*
*****
```

Structure search iteration limits have been increased. See HELP SLIMITS for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer

to the file summary sheet on the web at:
<http://www.cas.org/ONLINE/DBSS/registryss.html>

FILE HCAPLUS

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FILE COVERS 1907 - 1 Sep 2005 VOL 143 ISS 10
FILE LAST UPDATED: 31 Aug 2005 (20050831/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

FILE MARPAT

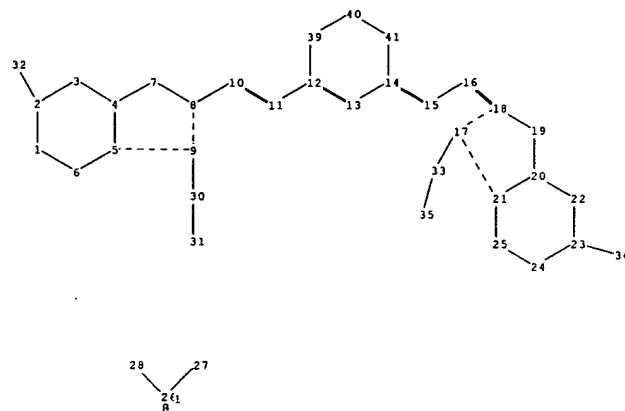
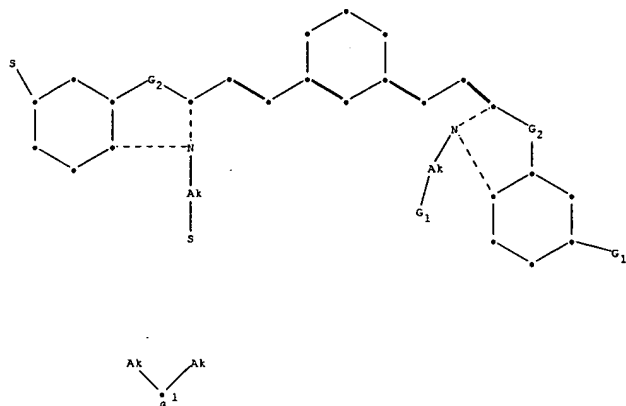
FILE CONTENT: 1988-PRESENT (VOL 143 ISS 09) (20050826/ED)

MOST RECENT CITATIONS FOR PATENTS FROM FIVE MAJOR ISSUING AGENCIES
(COVERAGE TO THESE DATES IS NOT COMPLETE):

US	6903214	07 JUN 2005
DE	10350965	25 MAY 2005
EP	1538192	08 JUN 2005
JP	2005136379	26 MAY 2005
WO	2005060437	07 JUL 2005

Expanded G-group definition display now available.

New CAS Information Use Policies, enter HELP USAGETERMS for details.



```

chain nodes :
  10 11 15 16 26 27 28 30 31 32 33 35 36
ring nodes :
  1 2 3 4 5 6 7 8 9 12 13 14 17 18 19 20 21 22 23 24 25
  39 40 41
chain bonds :
  2-32 8-10 9-30 10-11 11-12 14-15 15-16 16-18 17-33 23-36 26-27
  26-28 30-31 33-35
ring bonds :
  1-2 1-6 2-3 3-4 4-5 4-7 5-6 5-9 7-8 8-9 12-13 12-39 13-14
  14-41 17-21 17-18 18-19 19-20 20-21 20-22 21-25 22-23 23-24 24-25
  39-40 40-41
exact/norm bonds :
  1-2 1-6 2-3 2-32 3-4 4-5 4-7 5-6 5-9 7-8 8-9 8-10 9-30 10-11
  11-12 12-13 12-39 13-14 14-15 14-41 15-16 16-18 17-21 17-18 17-33
  18-19 19-20 20-21 20-22 21-25 22-23 23-24 23-36 24-25 26-27 26-28
  30-31 33-35 39-40 40-41

```

G1:H,S

G2:O,S,[*1]

Match level :

```

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom
10:CLASS 11:CLASS 12:CLASS 13:CLASS 14:CLASS 15:CLASS 16:CLASS
17:Atom 18:Atom 19:Atom 20:Atom 21:Atom 22:Atom 23:Atom 24:Atom
25:Atom 26:CLASS 27:CLASS 28:CLASS 30:CLASS 31:CLASS 32:CLASS
33:CLASS 35:CLASS 36:CLASS 39:Atom 40:Atom 41:Atom

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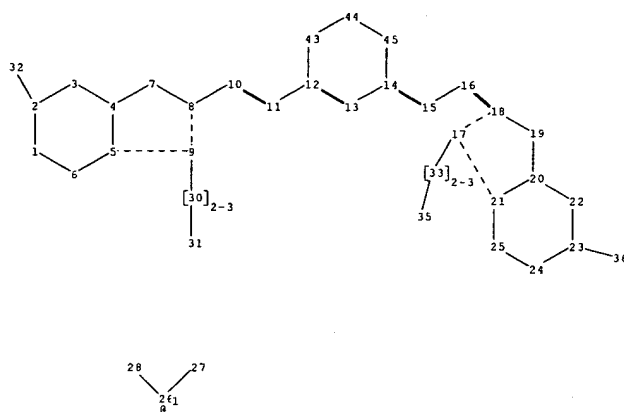
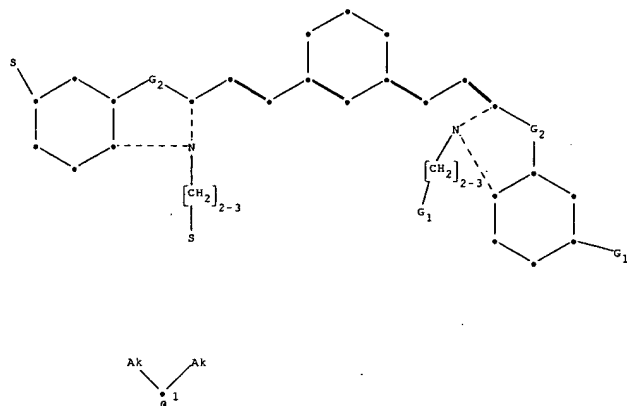
Generic attributes :

```

27:
Type of chain : Linear
Number of Carbon Atoms : less than 7
28:

```

Type of chain : Linear
Number of Carbon Atoms : less than 7



chain nodes :

10 11 15 16 26 27 28 30 31 32 33 35 36

ring nodes :

1 2 3 4 5 6 7 8 9 12 13 14 17 18 19 20 21 22 23 24 25
43 44 45

chain bonds :

2-32 8-10 9-30 10-11 11-12 14-15 15-16 16-18 17-33 23-36 26-27
26-28 30-31 33-35

ring bonds :

1-2 1-6 2-3 3-4 4-5 4-7 5-6 5-9 7-8 8-9 12-13 12-43 13-14
14-45 17-21 17-18 18-19 19-20 20-21 20-22 21-25 22-23 23-24 24-25
43-44 44-45

exact/norm bonds :

1-2 1-6 2-3 2-32 3-4 4-5 4-7 5-6 5-9 7-8 8-9 8-10 9-30 10-11
11-12 12-13 12-43 13-14 14-15 14-45 15-16 16-18 17-21 17-18 17-33
18-19 19-20 20-21 20-22 21-25 22-23 23-24 23-36 24-25 26-27 26-28
30-31 33-35 43-44 44-45

G1:H,S

G2:O,S, [*1]

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom
10:CLASS 11:CLASS 12:CLASS 13:CLASS 14:CLASS 15:CLASS 16:CLASS
17:Atom 18:Atom 19:Atom 20:Atom 21:Atom 22:Atom 23:Atom 24:Atom
25:Atom 26:CLASS 27:CLASS 28:CLASS 30:CLASS 31:CLASS 32:CLASS
33:CLASS 35:CLASS 36:CLASS 43:Atom 44:Atom 45:Atom

Generic attributes :

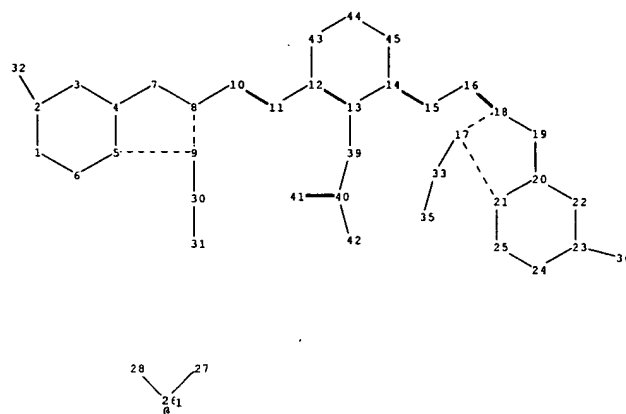
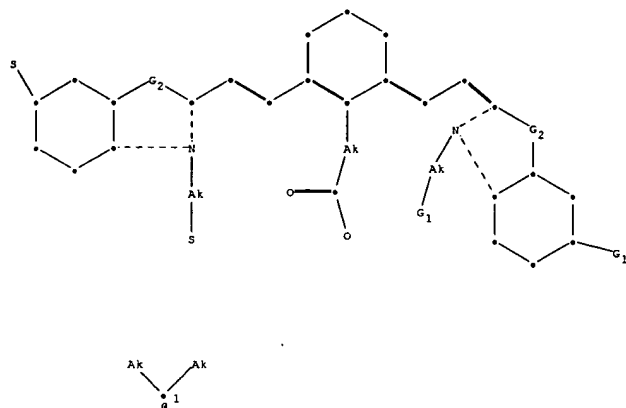
27:

Type of chain : Linear

Number of Carbon Atoms : less than 7

28:

Type of chain : Linear
Number of Carbon Atoms : less than 7



```

chain nodes :
  10 11 15 16 26 27 28 30 31 32 33 35 36 39 40 41 42
ring nodes :
  1 2 3 4 5 6 7 8 9 12 13 14 17 18 19 20 21 22 23 24 25
  43 44 45
chain bonds :
  2-32 8-10 9-30 10-11 11-12 13-39 14-15 15-16 16-18 17-33 23-36
  26-27 26-28 30-31 33-35 39-40 40-41 40-42
ring bonds :
  1-2 1-6 2-3 3-4 4-5 4-7 5-6 5-9 7-8 8-9 12-13 12-43 13-14
  14-45 17-21 17-18 18-19 19-20 20-21 20-22 21-25 22-23 23-24 24-25
  43-44 44-45
exact/norm bonds :
  1-2 1-6 2-3 2-32 3-4 4-5 4-7 5-6 5-9 7-8 8-9 8-10 9-30 10-11
  11-12 12-13 12-43 13-14 13-39 14-15 14-45 15-16 16-18 17-21 17-18
  17-33 18-19 19-20 20-21 20-22 21-25 22-23 23-24 23-36 24-25 26-27
  26-28 30-31 33-35 39-40 40-41 40-42 43-44 44-45

```

G1:H,S

G2:O,S,[*1]

Match level :

```

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom
10:CLASS 11:CLASS 12:CLASS 13:CLASS 14:CLASS 15:CLASS 16:CLASS
17:Atom 18:Atom 19:Atom 20:Atom 21:Atom 22:Atom 23:Atom 24:Atom
25:Atom 26:CLASS 27:CLASS 28:CLASS 30:CLASS 31:CLASS 32:CLASS
33:CLASS 35:CLASS 36:CLASS 39:CLASS 40:CLASS 41:CLASS 42:CLASS
43:Atom 44:CLASS 45:CLASS

```

Generic attributes :

27:

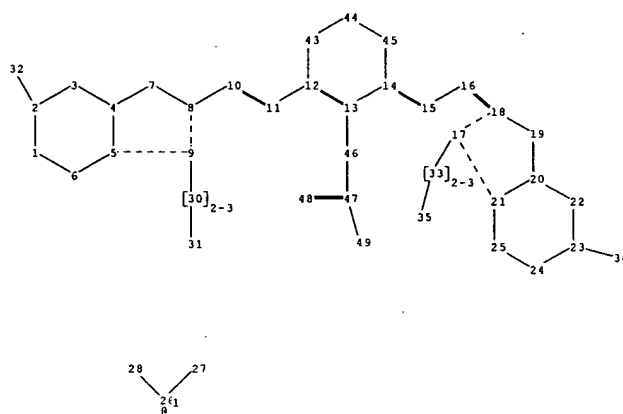
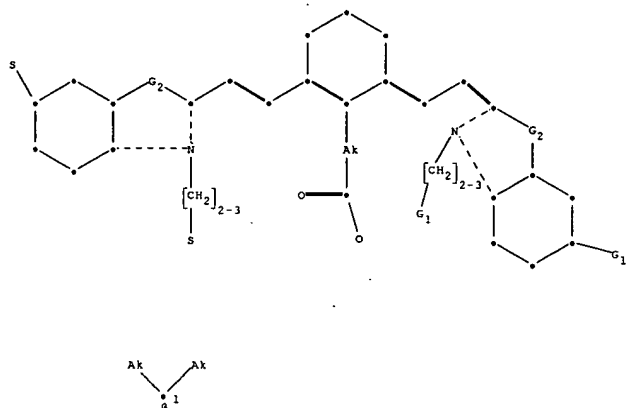
Type of chain : Linear

Number of Carbon Atoms : less than 7

28:

Type of chain : Linear

Number of Carbon Atoms : less than 7



chain nodes :

10 11 15 16 26 27 28 30 31 32 33 35 36 46 47 48 49

ring nodes :

1 2 3 4 5 6 7 8 9 12 13 14 17 18 19 20 21 22 23 24 25
43 44 45

chain bonds :

2-32 8-10 9-30 10-11 11-12 13-46 14-15 15-16 16-18 17-33 23-36
26-27 26-28 30-31 33-35 46-47 47-48 47-49

ring bonds :

1-2 1-6 2-3 3-4 4-5 4-7 5-6 5-9 7-8 8-9 12-13 12-43 13-14
14-45 17-21 17-18 18-19 19-20 20-21 20-22 21-25 22-23 23-24 24-25
43-44 44-45

exact/norm bonds :

1-2 1-6 2-3 2-32 3-4 4-5 4-7 5-6 5-9 7-8 8-9 8-10 9-30 10-11
11-12 12-13 12-43 13-14 13-46 14-15 14-45 15-16 16-18 17-21 17-18
17-33 18-19 19-20 20-21 20-22 21-25 22-23 23-24 23-36 24-25 26-27
26-28 30-31 33-35 43-44 44-45 46-47 47-48 47-49

G1:H,S

G2:O,S, [*1]

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom
10:CLASS 11:CLASS 12:CLASS 13:CLASS 14:CLASS 15:CLASS 16:CLASS
17:Atom 18:Atom 19:Atom 20:Atom 21:Atom 22:Atom 23:Atom 24:Atom
25:Atom 26:CLASS 27:CLASS 28:CLASS 30:CLASS 31:CLASS 32:CLASS
33:CLASS 35:CLASS 36:CLASS 43:Atom 44:Atom 45:Atom 46:CLASS 47:CLASS
48:CLASS 49:CLASS

Generic attributes :

27:

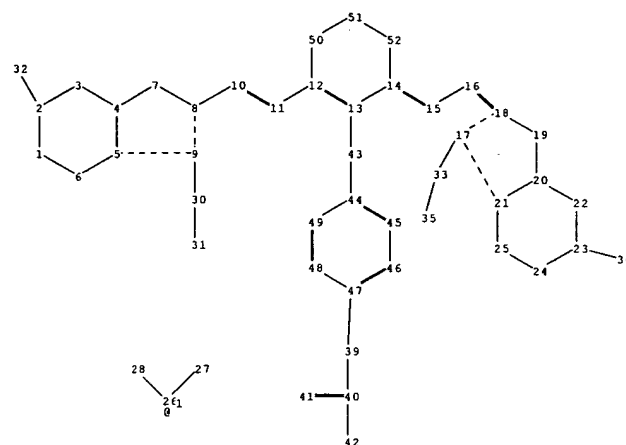
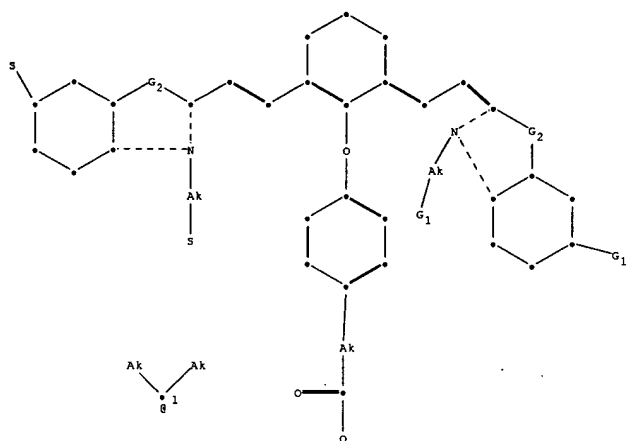
Type of chain : Linear

Number of Carbon Atoms : less than 7

28:

Type of chain : Linear

Number of Carbon Atoms : less than 7



chain nodes :

10 11 15 16 26 27 28 30 31 32 33 35 36, 39 40 41 42 43

ring nodes :

1 2 3 4 5 6 7 8 9 12 13 14 17 18 19 20 21 22 23 24 25
44 45 46 47 48 49 50 51 52

chain bonds :

2-32 8-10 9-30 10-11 11-12 13-43 14-15 15-16 16-18 17-33 23-36
26-27 26-28 30-31 33-35 39-40 39-47 40-41 40-42 43-44

ring bonds :

1-2 1-6 2-3 3-4 4-5 4-7 5-6 5-9 7-8 8-9 12-13 12-50 13-14
14-52 17-21 17-18 18-19 19-20 20-21 20-22 21-25 22-23 23-24 24-25
44-45 44-49 45-46 46-47 47-48 48-49 50-51 51-52

exact/norm bonds :

1-2 1-6 2-3 2-32 3-4 4-5 4-7 5-6 5-9 7-8 8-9 8-10 9-30 10-11
11-12 12-13 12-50 13-14 13-43 14-15 14-52 15-16 16-18 17-21 17-18
17-33 18-19 19-20 20-21 20-22 21-25 22-23 23-24 23-36 24-25 26-27
26-28 30-31 33-35 39-40 39-47 40-41 40-42 43-44 50-51 51-52

normalized bonds :

44-45 44-49 45-46 46-47 47-48 48-49

G1:H,S

G2:O,S,[*1]

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom
10:CLASS 11:CLASS 12:CLASS 13:CLASS 14:CLASS 15:CLASS 16:CLASS
17:Atom 18:Atom 19:Atom 20:Atom 21:Atom 22:Atom 23:Atom 24:Atom
25:Atom 26:CLASS 27:CLASS 28:CLASS 30:CLASS 31:CLASS 32:CLASS
33:CLASS 35:CLASS 36:CLASS 39:CLASS 40:CLASS 41:CLASS 42:CLASS
43:CLASS 44:Atom 45:Atom 46:Atom 47:Atom 48:Atom 49:Atom 50:Atom
51:Atom 52:Atom

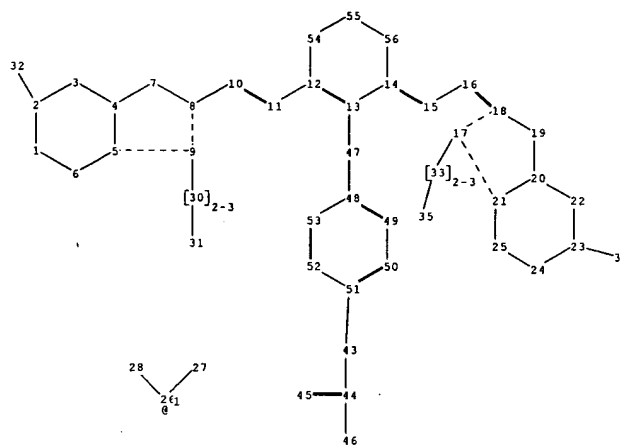
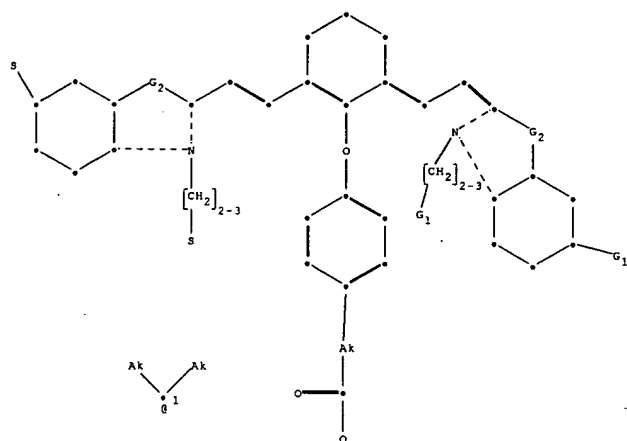
Generic attributes :

27:

Type of chain : Linear
Number of Carbon Atoms : less than 7

28:

Type of chain : Linear
Number of Carbon Atoms : less than 7



```

chain nodes :
  10 11 15 16 26 27 28 30 31 32 33 35 36 43 44 45 46 47
ring nodes :
  1  2  3  4  5  6  7  8  9 12 13 14 17 18 19 20 21 22 23 24 25
 48 49 50 51 52 53 54 55 56
chain bonds :
  2-32 8-10 9-30 10-11 11-12 13-47 14-15 15-16 16-18 17-33 23-36
 26-27 26-28 30-31 33-35 43-44 43-51 44-45 44-46 47-48
ring bonds :
  1-2 1-6 2-3 3-4 4-5 4-7 5-6 5-9 7-8 8-9 12-13 12-54 13-14
 14-56 17-21 17-18 18-19 19-20 20-21 20-22 21-25 22-23 23-24 24-25
 48-49 48-53 49-50 50-51 51-52 52-53 54-55 55-56
exact/norm bonds :
  1-2 1-6 2-3 2-32 3-4 4-5 4-7 5-6 5-9 7-8 8-9 8-10 9-30 10-11
 11-12 12-13 12-54 13-14 13-47 14-15 14-56 15-16 16-18 17-21 17-18
 17-33 18-19 19-20 20-21 20-22 21-25 22-23 23-24 23-36 24-25 26-27
 26-28 30-31 33-35 43-44 43-51 44-45 44-46 47-48 54-55 55-56
normalized bonds :
  48-49 48-53 49-50 50-51 51-52 52-53

```

G1:H,S

G2:O,S,[*1]

Match level :

```

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom
10:CLASS 11:CLASS 12:CLASS 13:CLASS 14:CLASS 15:CLASS 16:CLASS
17:Atom 18:Atom 19:Atom 20:Atom 21:Atom 22:Atom 23:Atom 24:Atom
25:Atom 26:CLASS 27:CLASS 28:CLASS 30:CLASS 31:CLASS 32:CLASS
33:CLASS 35:CLASS 36:CLASS 43:CLASS 44:CLASS 45:CLASS 46:CLASS
47:CLASS 48:Atom 49:Atom 50:Atom 51:Atom 52:Atom 53:Atom 54:Atom
55:Atom 56:Atom

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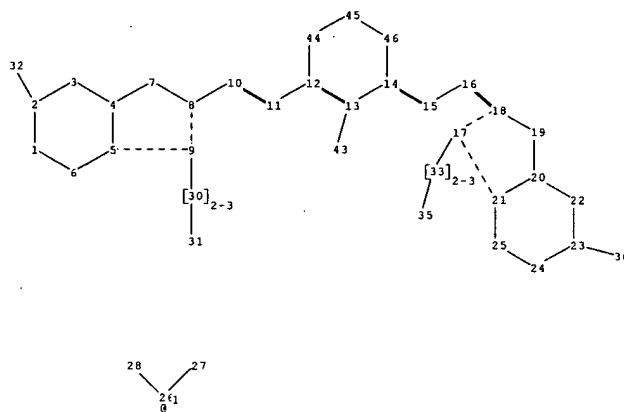
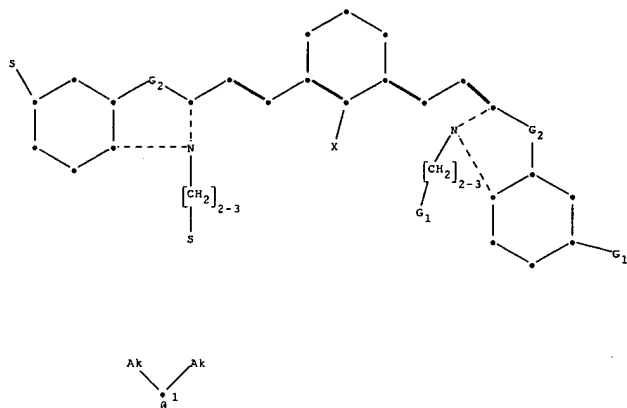
Generic attributes :

27:

Type of chain : Linear
Number of Carbon Atoms : less than 7

28:

Type of chain : Linear
Number of Carbon Atoms : less than 7



chain nodes :
 10 11 15 16 26 27 28 30 31 32 33 35 36 43
 ring nodes :
 1 2 3 4 5 6 7 8 9 12 13 14 17 18 19 20 21 22 23 24 25
 44 45 46
 chain bonds :
 2-32 8-10 9-30 10-11 11-12 13-43 14-15 15-16 16-18 17-33 23-36
 26-27 26-28 30-31 33-35
 ring bonds :
 1-2 1-6 2-3 3-4 4-5 4-7 5-6 5-9 7-8 8-9 12-13 12-44 13-14
 14-46 17-21 17-18 18-19 19-20 20-21 20-22 21-25 22-23 23-24 24-25
 44-45 45-46
 exact/norm bonds :
 1-2 1-6 2-3 2-32 3-4 4-5 4-7 5-6 5-9 7-8 8-9 8-10 9-30 10-11
 11-12 12-13 12-44 13-14 13-43 14-15 14-46 15-16 16-18 17-21 17-18
 17-33 18-19 19-20 20-21 20-22 21-25 22-23 23-24 23-36 24-25 26-27
 26-28 30-31 33-35 44-45 45-46

G1:H,S

G2:O,S,[*1]

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom
 10:CLASS 11:CLASS 12:CLASS 13:CLASS 14:CLASS 15:CLASS 16:CLASS
 17:Atom 18:Atom 19:Atom 20:Atom 21:Atom 22:Atom 23:Atom 24:Atom
 25:Atom 26:CLASS 27:CLASS 28:CLASS 30:CLASS 31:CLASS 32:CLASS
 33:CLASS 35:CLASS 36:CLASS 43:CLASS 44:Atom 45:Atom 46:Atom

Generic attributes :

27:

Type of chain : Linear

Number of Carbon Atoms : less than 7

28:

Type of chain : Linear
Number of Carbon Atoms : less than 7

=> d his ful

(FILE 'HOME' ENTERED AT 10:00:59 ON 01 SEP 2005)

FILE 'REGISTRY' ENTERED AT 10:02:08 ON 01 SEP 2005

L1 STRUCTURE UPLOADED
L2 STRUCTURE UPLOADED
L3 STRUCTURE UPLOADED
L4 STRUCTURE UPLOADED
L5 STRUCTURE UPLOADED
L6 STRUCTURE UPLOADED
L7 11 SEA SSS SAM L3
L8 141 SEA SSS FUL L3
L9 77 SEA SUB=L8 SSS FUL L2
L10 6 SEA SUB=L9 SSS FUL L5
L11 0 SEA SUB=L8 SSS FUL L1
L12 0 SEA SUB=L9 SSS FUL L6
L13 STRUCTURE UPLOADED
L14 0 SEA SUB=L8 SSS FUL L13
D L10 1-6 IDE

FILE 'HCAPLUS' ENTERED AT 10:18:33 ON 01 SEP 2005

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D L15
L16 35 SEA PLU=ON L9
D L16 30-35 IBIB HITSTR
D L16 25-29 IBIB HITSTR

FILE 'MARPAT' ENTERED AT 10:20:52 ON 01 SEP 2005

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L*** DEL 0 S L5 SAM
L18 11 SEA SSS FUL L5
L19 2 SEA SSS SAM L3
L20 92 SEA SSS FUL L3
D L18 1-3 IBIB
D L18 9-11 IBIB IDE
D L18 1-8 IBIB IDE
D L20 1-5 IBIB
D L20 5-10 IBIB
D L20 11-20 IBIB
L21 0 SEA PLU=ON L20 AND (PD<20030129 OR PRD<20030129)
L22 0 SEA PLU=ON L20 AND PY<2004
D L20 21-25 IBIB
D L20 24 IBIB IDE
D L20 26-30 IBIB IDE

FILE HOME

FILE REGISTRY

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 31 AUG 2005 HIGHEST RN 862246-83-1
DICTIONARY FILE UPDATES: 31 AUG 2005 HIGHEST RN 862246-83-1

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2005

Please note that search-term pricing does apply when conducting SmartSELECT searches.

*
* The CA roles and document type information have been removed from *
* the IDE default display format and the ED field has been added, *
* effective March 20, 2005. A new display format, IDERL, is now *
* available and contains the CA role and document type information. *
*

Structure search iteration limits have been increased. See HELP SLIMITS for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at:
<http://www.cas.org/ONLINE/DBSS/registryss.html>

FILE HCAPLUS

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FILE COVERS 1907 - 1 Sep 2005 VOL 143 ISS 10
FILE LAST UPDATED: 31 Aug 2005 (20050831/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

FILE MARPAT

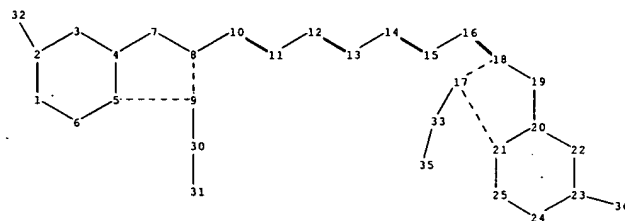
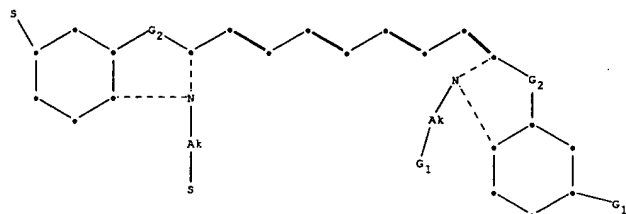
FILE CONTENT: 1988-PRESENT (VOL 143 ISS 09) (20050826/ED)

MOST RECENT CITATIONS FOR PATENTS FROM FIVE MAJOR ISSUING AGENCIES (COVERAGE TO THESE DATES IS NOT COMPLETE):

US	6903214	07 JUN 2005
DE	10350965	25 MAY 2005
EP	1538192	08 JUN 2005
JP	2005136379	26 MAY 2005
WO	2005060437	07 JUL 2005

Expanded G-group definition display now available.

New CAS Information Use Policies, enter HELP USAGETERMS for details.



chain nodes :

10 11 12 13 14 15 16 26 27 28 30 31 32 33 35 36

ring nodes :

1 2 3 4 5 6 7 8 9 17 18 19 20 21 22 23 24 25

chain bonds :

2-32 8-10 9-30 10-11 11-12 12-13 13-14 14-15 15-16 16-18 17-33
23-36 26-27 26-28 30-31 33-35

ring bonds :

1-2 1-6 2-3 3-4 4-5 4-7 5-6 5-9 7-8 8-9 17-21 17-18 18-19
19-20 20-21 20-22 21-25 22-23 23-24 24-25

exact/norm bonds :

1-2 1-6 2-3 2-32 3-4 4-5 4-7 5-6 5-9 7-8 8-9 8-10 9-30 10-11
11-12 12-13 13-14 14-15 15-16 16-18 17-21 17-18 17-33 18-19 19-20
20-21 20-22 21-25 22-23 23-24 23-36 24-25 26-27 26-28 30-31 33-35

G1:H,S

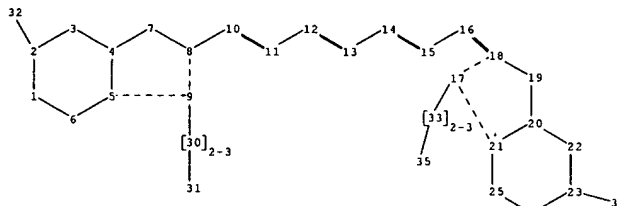
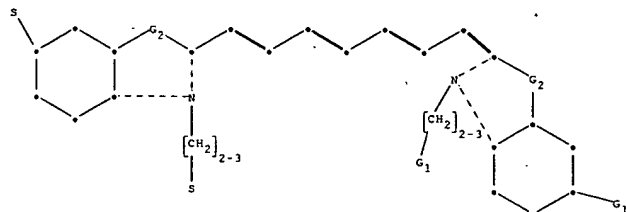
G2:O,S, [*1]

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom
10:CLASS 11:CLASS 12:CLASS 13:CLASS 14:CLASS 15:CLASS 16:CLASS
17:Atom 18:Atom 19:Atom 20:Atom 21:Atom 22:Atom 23:Atom 24:Atom
25:Atom 26:CLASS 27:CLASS 28:CLASS 30:CLASS 31:CLASS 32:CLASS
33:CLASS 35:CLASS 36:CLASS

Generic attributes :

27:
Type of chain : Linear
Number of Carbon Atoms : less than 7
28:
Type of chain : Linear
Number of Carbon Atoms : less than 7



chain nodes :

10 11 12 13 14 15 16 26 27 28 30 31 32 33 35 36

ring nodes :

1 2 3 4 5 6 7 8 9 17 18 19 20 21 22 23 24 25

chain bonds :

2-32 8-10 9-30 10-11 11-12 12-13 13-14 14-15 15-16 16-18 17-33
23-36 26-27 26-28 30-31 33-35

ring bonds :

1-2 1-6 2-3 3-4 4-5 4-7 5-6 5-9 7-8 8-9 17-21 17-18 18-19
19-20 20-21 20-22 21-25 22-23 23-24 24-25

exact/norm bonds :

1-2 1-6 2-3 2-32 3-4 4-5 4-7 5-6 5-9 7-8 8-9 8-10 9-30 10-11
11-12 12-13 13-14 14-15 15-16 16-18 17-21 17-18 17-33 18-19 19-20
20-21 20-22 21-25 22-23 23-24 23-36 24-25 26-27 26-28 30-31 33-35

G1:H,S

G2:O,S, [*1]

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom
10:CLASS 11:CLASS 12:CLASS 13:CLASS 14:CLASS 15:CLASS 16:CLASS
17:Atom 18:Atom 19:Atom 20:Atom 21:Atom 22:Atom 23:Atom 24:Atom
25:Atom 26:CLASS 27:CLASS 28:CLASS 30:CLASS 31:CLASS 32:CLASS
33:CLASS 35:CLASS 36:CLASS

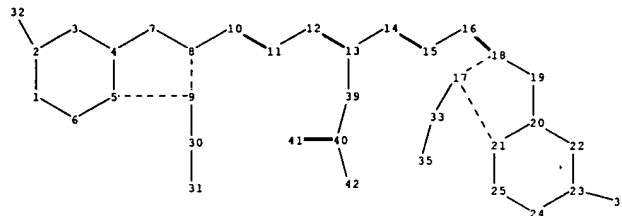
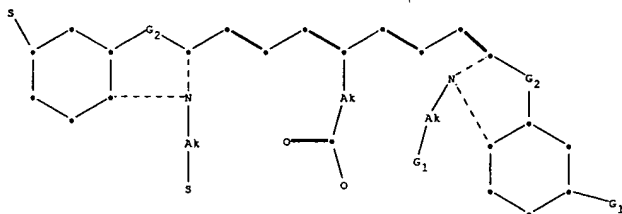
Generic attributes :-

27:

Type of chain : Linear
Number of Carbon Atoms : less than 7

28:

Type of chain : Linear
Number of Carbon Atoms : less than 7



```

chain nodes :
  10  11  12  13  14  15  16  26  27  28  30  31  32  33  35  36  39  40  41
  42
ring nodes :
  1   2   3   4   5   6   7   8   9  17  18  19  20  21  22  23  24  25
chain bonds :
  2-32  8-10  9-30  10-11  11-12  12-13  13-14  13-39  14-15  15-16  16-18
  17-33  23-36  26-27  26-28  30-31  33-35  39-40  40-41  40-42
ring bonds :
  1-2  1-6  2-3  3-4  4-5  4-7  5-6  5-9  7-8  8-9  17-21  17-18  18-19
  19-20  20-21  20-22  21-25  22-23  23-24  24-25
exact/norm bonds :
  1-2  1-6  2-3  2-32  3-4  4-5  4-7  5-6  5-9  7-8  8-9  8-10  9-30  10-11
  11-12  12-13  13-14  13-39  14-15  15-16  16-18  17-21  17-18  17-33  18-19
  19-20  20-21  20-22  21-25  22-23  23-24  23-36  24-25  26-27  26-28  30-31
  33-35  39-40  40-41  40-42

```

G1:H,S

G2:O,S,[*1]

Match level :

```

1:Atom  2:Atom  3:Atom  4:Atom  5:Atom  6:Atom  7:Atom  8:Atom  9:Atom
10:CLASS 11:CLASS 12:CLASS 13:CLASS 14:CLASS 15:CLASS 16:CLASS
17:Atom 18:Atom 19:Atom 20:Atom 21:Atom 22:Atom 23:Atom 24:Atom
25:Atom 26:CLASS 27:CLASS 28:CLASS 30:CLASS 31:CLASS 32:CLASS
33:CLASS 35:CLASS 36:CLASS 39:CLASS 40:CLASS 41:CLASS 42:CLASS

```

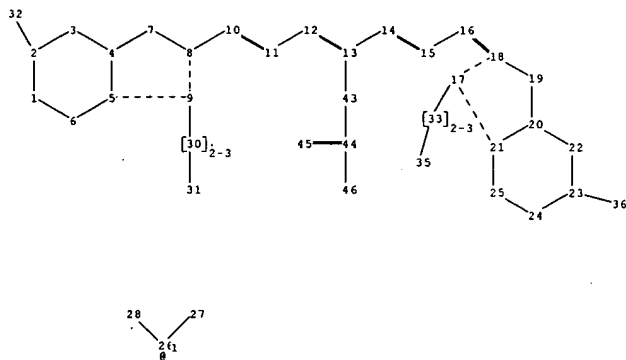
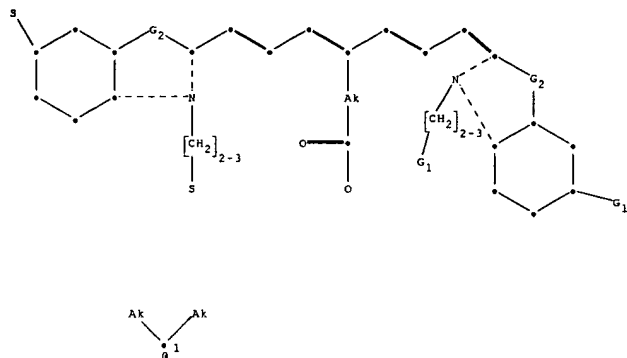
Generic attributes :

```

27:
Type of chain      : Linear
Number of Carbon Atoms : less than 7
28:
Type of chain      : Linear

```

Number of Carbon Atoms : less than 7



chain nodes :

10 11 12 13 14 15 16 26 27 28 30 31 32 33 35 36 43 44 45
46

ring nodes :

1 2 3 4 5 6 7 8 9 17 18 19 20 21 22 23 24 25

chain bonds :

2-32 8-10 9-30 10-11 11-12 12-13 13-14 13-43 14-15 15-16 16-18
17-33 23-36 26-27 26-28 30-31 33-35 43-44 44-45 44-46

ring bonds :

1-2 1-6 2-3 3-4 4-5 4-7 5-6 5-9 7-8 8-9 17-21 17-18 18-19
19-20 20-21 20-22 21-25 22-23 23-24 24-25

exact/norm bonds :

1-2 1-6 2-3 2-32 3-4 4-5 4-7 5-6 5-9 7-8 8-9 8-10 9-30 10-11
11-12 12-13 13-14 13-43 14-15 15-16 16-18 17-21 17-18 17-33 18-19
19-20 20-21 20-22 21-25 22-23 23-24 23-36 24-25 26-27 26-28 30-31
33-35 43-44 44-45 44-46

G1:H,S

G2:O,S,[*1]

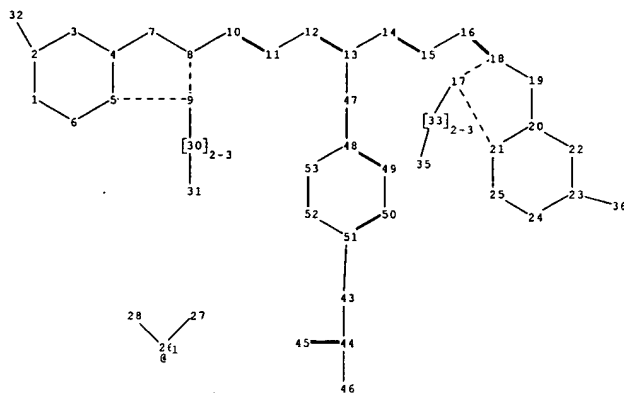
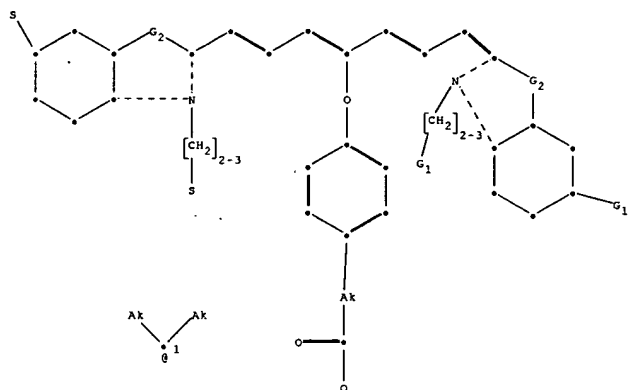
Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom
10:CLASS 11:CLASS 12:CLASS 13:CLASS 14:CLASS 15:CLASS 16:CLASS
17:Atom 18:Atom 19:Atom 20:Atom 21:Atom 22:Atom 23:Atom 24:Atom
25:Atom 26:CLASS 27:CLASS 28:CLASS 30:CLASS 31:CLASS 32:CLASS
33:CLASS 35:CLASS 36:CLASS 43:CLASS 44:CLASS 45:CLASS 46:CLASS

Generic attributes :

27:
Type of chain : Linear
Number of Carbon Atoms : less than 7
28:
Type of chain : Linear

Number of Carbon Atoms : less than 7



chain nodes :

10 11 12 13 14 15 16 26 27 28 30 31 32 33 35 36 43 44 45
46 47

ring nodes :

1 2 3 4 5 6 7 8 9 17 18 19 20 21 22 23 24 25 48 49 50
51 52 53

chain bonds :

2-32 8-10 9-30 10-11 11-12 12-13 13-14 13-47 14-15 15-16 16-18
17-33 23-36 26-27 26-28 30-31 33-35 43-44 43-51 44-45 44-46 47-48

ring bonds :

1-2 1-6 2-3 3-4 4-5 4-7 5-6 5-9 7-8 8-9 17-21 17-18 18-19
19-20 20-21 20-22 21-25 22-23 23-24 24-25 48-49 48-53 49-50 50-51
51-52 52-53

exact/norm bonds :

1-2 1-6 2-3 2-32 3-4 4-5 4-7 5-6 5-9 7-8 8-9 8-10 9-30 10-11
11-12 12-13 13-14 13-47 14-15 15-16 16-18 17-21 17-18 17-33 18-19
19-20 20-21 20-22 21-25 22-23 23-24 23-36 24-25 26-27 26-28 30-31
33-35 43-44 43-51 44-45 44-46 47-48

normalized bonds :

48-49 48-53 49-50 50-51 51-52 52-53

G1:H,S

G2:O,S,[*1]

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom
10:CLASS 11:CLASS 12:CLASS 13:CLASS 14:CLASS 15:CLASS 16:CLASS
17:Atom 18:Atom 19:Atom 20:Atom 21:Atom 22:Atom 23:Atom 24:Atom
25:Atom 26:CLASS 27:CLASS 28:CLASS 30:CLASS 31:CLASS 32:CLASS
33:CLASS 35:CLASS 36:CLASS 43:CLASS 44:CLASS 45:CLASS 46:CLASS
47:CLASS 48:Atom 49:Atom 50:Atom 51:Atom 52:Atom 53:Atom

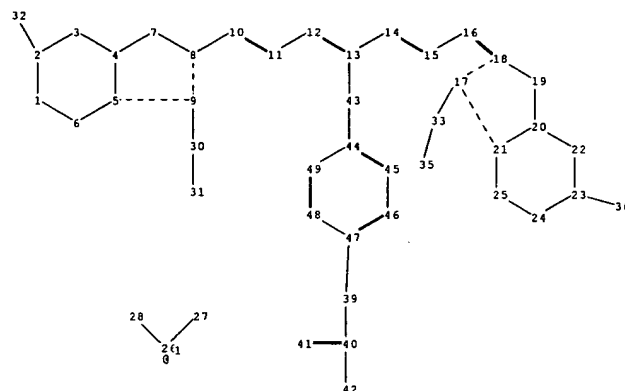
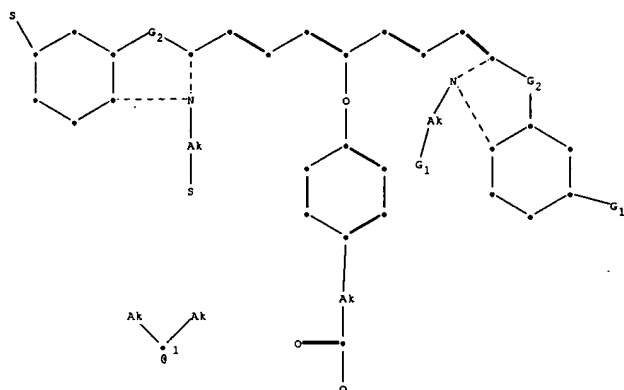
Generic attributes :

27:

Type of chain : Linear
Number of Carbon Atoms : less than 7

28:

Type of chain : Linear
Number of Carbon Atoms : less than 7



```

chain nodes :
  10 11 12 13 14 15 16 26 27 28 30 31 32 33 35 36 39 40 41
  42 43
ring nodes :
  1 2 3 4 5 6 7 8 9 17 18 19 20 21 22 23 24 25 44 45 46
  47 48 49
chain bonds :
  2-32 8-10 9-30 10-11 11-12 12-13 13-14 13-43 14-15 15-16 16-18
  17-33 23-36 26-27 26-28 30-31 33-35 39-40 39-47 40-41 40-42 43-44
ring bonds :
  1-2 1-6 2-3 3-4 4-5 4-7 5-6 5-9 7-8 8-9 17-21 17-18 18-19
  19-20 20-21 20-22 21-25 22-23 23-24 24-25 44-45 44-49 45-46 46-47
  47-48 48-49
exact/norm bonds :
  1-2 1-6 2-3 2-32 3-4 4-5 4-7 5-6 5-9 7-8 8-9 8-10 9-30 10-11
  11-12 12-13 13-14 13-43 14-15 15-16 16-18 17-21 17-18 17-33 18-19
  19-20 20-21 20-22 21-25 22-23 23-24 23-36 24-25 26-27 26-28 30-31
  33-35 39-40 39-47 40-41 40-42 43-44
normalized bonds :
  44-45 44-49 45-46 46-47 47-48 48-49

```

G1:H,S

G2:O,S,[*1]

Match level :

```

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom
10:CLASS 11:CLASS 12:CLASS 13:CLASS 14:CLASS 15:CLASS 16:CLASS
17:Atom 18:Atom 19:Atom 20:Atom 21:Atom 22:Atom 23:Atom 24:Atom
25:Atom 26:CLASS 27:CLASS 28:CLASS 30:CLASS 31:CLASS 32:CLASS
33:CLASS 35:CLASS 36:CLASS 39:CLASS 40:CLASS 41:CLASS 42:CLASS
43:CLASS 44:Atom 45:Atom 46:Atom 47:Atom 48:Atom 49:Atom

```

Generic attributes :

27:

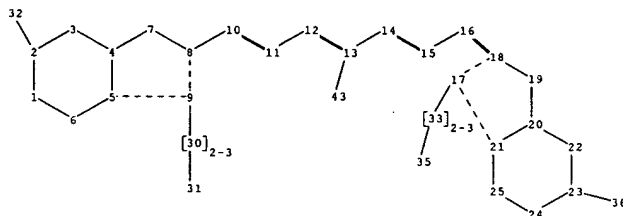
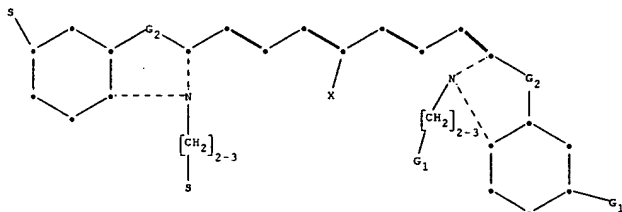
Type of chain : Linear

Number of Carbon Atoms : less than 7

28:

Type of chain : Linear

Number of Carbon Atoms : less than 7



chain nodes :

10 11 12 13 14 15 16 26 27 28 30 31 32 33 35 36 43

ring nodes :

1 2 3 4 5 6 7 8 9 17 18 19 20 21 22 23 24 25

chain bonds :

2-32 8-10 9-30 10-11 11-12 12-13 13-14 13-43 14-15 15-16 16-18
17-33 23-36 26-27 26-28 30-31 33-35

ring bonds :

1-2 1-6 2-3 3-4 4-5 4-7 5-6 5-9 7-8 8-9 17-21 17-18 18-19
19-20 20-21 20-22 21-25 22-23 23-24 24-25

exact/norm bonds :

1-2 1-6 2-3 2-32 3-4 4-5 4-7 5-6 5-9 7-8 8-9 8-10 9-30 10-11
11-12 12-13 13-14 13-43 14-15 15-16 16-18 17-21 17-18 17-33 18-19
19-20 20-21 20-22 21-25 22-23 23-24 23-36 24-25 26-27 26-28 30-31
33-35

G1:H,S

G2:O,S,[*1]

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom
10:CLASS 11:CLASS 12:CLASS 13:CLASS 14:CLASS 15:CLASS 16:CLASS
17:Atom 18:Atom 19:Atom 20:Atom 21:Atom 22:Atom 23:Atom 24:Atom
25:Atom 26:CLASS 27:CLASS 28:CLASS 30:CLASS 31:CLASS 32:CLASS
33:CLASS 35:CLASS 36:CLASS 43:CLASS

Generic attributes :

27:

Type of chain : Linear

Number of Carbon Atoms : less than 7

28:

Type of chain : Linear

Number of Carbon Atoms : less than 7